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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/521,827 | 01/21/2005 | Robert J. Fleming | 58046US012 | 2068 |

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| EXAMINER |
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LAVILLA, MICHAEL E

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| ART UNIT | PAPER NUMBER |
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1775

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,827

Applicant(s)

FLEMING ET AL.

Examiner

Michael La Villa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 17-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20050506</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, Claims 1-16, in the reply filed on 12 December 2005 is acknowledged.
2. Claims 17-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12 December 2005.
3. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 5. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - I. Regarding Claims 1-16, it is unclear whether the list of specific definitions of terms, provided in the Specification at paragraphs 23-32, defines claim terminology, or do these definitions not limit the claim terminology?
 - II. Regarding Claim 1, it is unclear whether the described structure involving a support, a metal layer, and a protective layer necessarily requires that the "extensible metal or metal alloy layer" is sandwiched

by the support and protective layer or whether the three layers may be arranged having any one layer between the other two.

- III. Regarding Claim 5, it is unclear whether the claimed two layers describe layers in addition to the “extensible metal or metal alloy layer” or whether the claimed two layers may or may not be “extensible metal or metal alloy layer.”
- IV. Regarding Claim 6, it is unclear what is the antecedent basis of the phrase “the layers.” Which layers are these?
- V. Regarding Claim 7, line 3, it is unclear what role the phrase that starts with “, or” plays in terms of claim grammar and structure of the claimed article. Does the phrase following “or” refer to an alternative “wherein” condition or to alternative composition of the “adjacent layer” mentioned in line 2. If the former, what constitute so-called “adjacent layers”? Can an “adhesion-enhancing treatment” imply forming a layer of a new material, or must it be a modification of an already formed layer? Should the comma be eliminated? It is unclear whether the increased corrosion resistance is to be obtained under all circumstances or only upon the invocation of “one or more adjacent layers within the film comprise an adhesion-enhancing adjuvant.”
- VI. Regarding Claims 8-10, it is unclear what is meant by the phrase “an electromagnetic shielding capability that is retained.” Does this

claimed retention require no diminution in capability or merely some finite amount of capability?

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-3 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman et al. USPN 4,965,408. Chapman teaches a metal layer sandwiched between a support, including flexible and thermoplastic materials, and a protective layer. See Chapman (col. 3, line 20 through col. 4, line 33). Chapman suggests a polymeric protective layer that may be comprised of reacted together, i.e., cross-linked, polymeric materials. See Chapman (col. 3, lines 20-39). Chapman suggests applying the formed laminate permanently to curved objects such as luggage and furniture. See Chapman (col. 5, lines 27-

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64). Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the articles of Chapman from cross-linked polymeric protective layer materials and to form structures having permanently deformed curved geometries, as Chapman suggests that effective articles may be fabricated in this manner. The laminates are disclosed as not being able to block all incident radiation.

Allowable Subject Matter

10. Claims 4-6, 15, and 16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
11. Claims 4-6, 15, and 16 are allowable, as the subject matter of these claims is not taught or suggested by the reviewed prior art. Particularly, the claimed element of a "permanently deformed curved region" is not taught or suggested in combination with the other claimed limitations.

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa
21 February 2006



MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER